

## Transportation Safety and Mobility

**NOVEMBER 2014**

**Project Title:**

Pedestrian Safety Improvement Program (PSIP)

**Task Number:** 2209

**Start Date:** August 9, 2011

**Completion Date:** March 31, 2014

**Product Category:** New or improved decision support tool, simulation, model, or algorithm (software)

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## Pedestrian Safety Improvement Program

*Implementing a safety program to reduce pedestrian fatalities and injuries*

### WHAT WAS THE NEED?

Over the past decade, pedestrians accounted for approximately 12% of all traffic fatalities in the United States, totaling more than 4,500 deaths per year. In California, the proportion of pedestrian fatalities is higher, at approximately 20% of traffic-related fatalities. Additionally, progress in reducing foot traffic fatalities in California has been slower than for vehicle fatalities. Passenger vehicle fatalities declined by 43% from 2006-12, but pedestrian fatalities by only 15%. Data also indicates that pedestrians are 37 times more vulnerable than the rest of roadway users in California—that is, they suffer 37 times more injuries than they inflict on others.



Improving pedestrian safety in California dovetails with efforts already underway. For example, Challenge Area 8 of the Strategic Highway Safety Plan has worked for several years to represent the needs of pedestrians at the state level and to develop achievable goals for improved pedestrian safety. Furthermore, the recent external evaluation by the State Smart Transportation Initiative highlighted the need for Caltrans to modify its efforts and programming to better reflect statewide goals of improved safety and mobility for non-motorized modes.

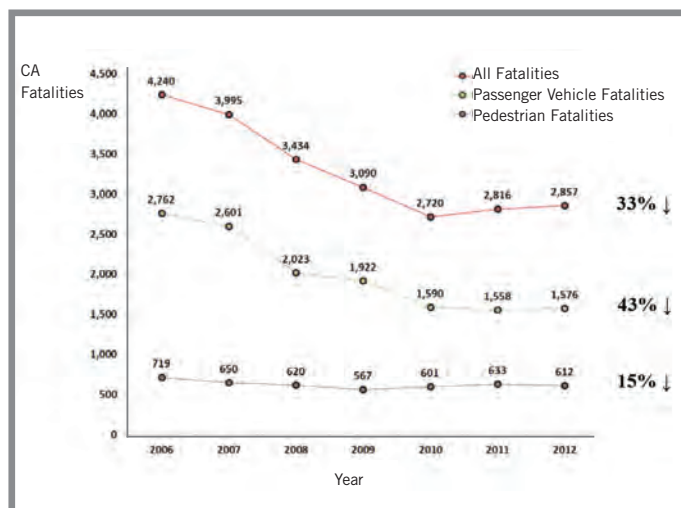
### WHAT WAS OUR GOAL?

The goal was to identify opportunities and challenges to implement a pedestrian safety program to reduce fatalities and injuries.

## WHAT DID WE DO?

Caltrans, in partnership with the University of California, Berkeley Safe Transportation Research and Education Center, identified and conducted the following eight tasks for improving pedestrian safety. Each task's activities are intentionally pragmatic, with the purpose of helping Caltrans and the state make gradual ongoing progress toward enhancing pedestrian safety.

1. **Data access**—Tools to improve access to existing pedestrian safety data
2. **Pedestrian volume and infrastructure**—Model for urban arterials applicable across the state
3. **Data evaluation**—Pedestrian Safety Report Card, a snapshot of collisions and trip patterns statewide
4. **Hazard assessment**—New pedestrian hotspot monitoring method and reporting tool to identify hazardous locations at the district level
5. **Countermeasure selection**—Analysis of statewide incidence and severity of pedestrian collisions to guide the development of pedestrian crosswalk enhancements
6. **Economic appraisal**—Assessment of available resources to implement countermeasures and programs to improve pedestrian safety
7. **Funding sources and strategies**—Evaluation of various approaches to prioritizing countermeasures through cost-benefit analysis
8. **Institutionalization**—Survey of available and lacking training and education material about pedestrian safety



*Pedestrian fatalities are declining at a slower rate than passenger vehicle fatalities.*

## WHAT WAS THE OUTCOME?

The researchers developed a preliminary set of tools and activities to monitor pedestrian safety across the state. They identified resources needed to address the imbalance between pedestrians and motorized roadway users. The project also provided recommendations for further development of the program to support institutionalization of pedestrian safety considerations statewide within Caltrans and as part of district-level safety analysis practices.

## WHAT IS THE BENEFIT?

Pedestrians are the most vulnerable group of roadway users. California must improve transit conditions to improve pedestrian safety. This statewide analysis of pedestrian safety and the subsequent changes could lead to fewer injuries and fatalities on the California state highway system.

## LEARN MORE

To view the complete report:  
[www.dot.ca.gov/research/researchreports/reports/2014/final\\_report\\_task\\_2209.pdf](http://www.dot.ca.gov/research/researchreports/reports/2014/final_report_task_2209.pdf)



*A collision profile page shows basic details and an interactive Google Street View.*